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Tuna Newsletter

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- Southwest Region
- Southwest Fisheries Science Center

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U.S. TUNA STATISTICS

Editor's note: The following articles were prepared by NMFS personnel from data and information gathered from sources in the U.S. tuna industry and government.

U.S. CANNED TUNA INDUSTRY HIGHLIGHTS, THIRD QUARTER 1993

Total receipts of tuna by U.S. canners during the third quarter of 1993 (July-September) increased by 1% to the equivalent of 119,900 short tons (st) of whole fish (round weight), compared to the third quarter of 1992 (Table 1). The principal species received was skipjack tuna with 56% of the total, followed by albacore and yellowfin tuna, with 23% and 21% of the total, respectively. Yellowfin tuna receipts were up by 53%, while albacore and skipjack tuna receipts were down by 12% and 5%, respectively.

Receipts for the first three quarters of 1993 totaled 330,500 st, a 4% decrease from the previous year (Table 2). Skipjack tuna receipts were down by 2%, yellowfin tuna receipts were down by 6% and albacore receipts were down by 7%.

Although the vast majority of tuna received by U.S. canners is whole fish, some quantity is received as loins or gilled-and-gutted. The ratio of tuna loins to total receipts for the third quarter of 1993 was 7%, compared to 4% for the third quarter of 1992. Receipts of tuna loins for the first three quarters of 1993 totaled 16,600 st, down by 21% from the previous year. (The round weight totals used above were approximated by converting weights of loins and gilled-and-gutted receipts by factors of 2.25 and 1.11, respectively. For the remainder of this ar-

Table 1. Total U.S. cannery receipts (st) by species for the third quarters of 1992 and 1993. Totals may not add due to rounding.

Jul-Sep	Type	Albacore	Skipjack	Yellowfin[1]	TOTAL
1992	ROUND	31,300	65,500	11,800	108,500
	GILLED & GUTTED	0	0	300	300
	LOIN	*	2,700	1,800	4,500
	TOTAL (as received)	31,300	68,200	13,900	113,300
	TOTAL (estimated round wt)[2]	31,300	71,500	16,100	118,900
1993	ROUND	27,000	55,900	19,500	102,400
	GILLED & GUTTED	0	0	500	500
	LOIN	300	5,200	2,000	7,600
	TOTAL (as received)	27,300	61,100	22,000	110,400
	TOTAL (estimated round wt)[2]	27,700	67,700	24,600	119,900

*Less than 100 st reported for this category.

[1]May include a small amount of bigeye tuna.

[2]Converted to round weight by using factors of 1.11 for gilled-and-gutted and 2.25 for loins.

Table 2. Total U.S. cannery receipts (st) by species for the first three quarters of 1992 and 1993. Totals may not add due to rounding.

Jan-Sep	Source	Albacore	Skipjack	Yellowfin[1]	TOTAL
1992	ROUND	77,200	163,300	53,800	294,300
	GILLED & GUTTED	0	0	2,100	2,100
	LOIN	*	13,600	7,500	21,100
	TOTAL (as received)	77,200	176,900	63,300	317,400
	TOTAL (estimated round wt)[2]	77,200	193,900	72,900	344,000
1993	ROUND	70,300	163,700	57,100	291,200
	GILLED & GUTTED	*	*	1,900	1,900
	LOIN	700	11,600	4,300	16,600
	TOTAL (as received)	71,000	175,300	63,300	309,600
	TOTAL (estimated round wt)[2]	71,900	189,800	68,800	330,500

*Less than 100 st reported for this category.

[1]May include a small amount of bigeye tuna.

[2]Converted to round weight by using factors of 1.11 for gilled-and-gutted and 2.25 for loins.

Table 3. U.S. cannery receipts (st) of domestic and imported tuna by species for the third quarters of 1992, 1993 and the recent (1988-92) third quarter averages. Totals may not add due to rounding.

Jul-Sep	Source	Albacore	Skipjack	Yellowfin[1]	TOTAL
AMERICAN SAMOA & CALIFORNIA					
1992	DOMESTIC	2,000	24,900	3,900	30,800
	IMPORTED	11,700	9,600	4,100	25,400
	TOTAL	13,700	34,500	8,100	56,200
1993	DOMESTIC	3,000	37,600	10,700	51,300
	IMPORTED	9,400	4,900	2,400	16,700
	TOTAL	12,400	42,500	13,100	68,000
1988-92 Average	DOMESTIC	1,500	23,800	9,800	35,100
	IMPORTED	9,500	8,900	2,800	21,200
	TOTAL	11,000	32,700	12,600	56,300
PUERTO RICO					
1992	DOMESTIC	0	28,600	4,000	32,700
	IMPORTED	17,600	5,100	1,800	24,400
	TOTAL	17,600	33,700	5,800	57,100
1993	DOMESTIC	0	10,900	5,100	16,000
	IMPORTED	14,900	7,700	3,800	26,400
	TOTAL	14,900	18,700	8,900	42,400
1988-92 Average	DOMESTIC	200	10,800	9,100	20,200
	IMPORTED	13,300	15,900	8,500	37,700
	TOTAL	13,500	26,700	17,700	57,900
TOTAL					
1992	DOMESTIC	2,000	53,500	8,000	63,400
	IMPORTED	29,300	14,700	5,900	49,800
	TOTAL	31,300	68,200	13,900	113,300
1993	DOMESTIC	3,000	48,500	15,800	67,400
	IMPORTED	24,200	12,600	6,200	43,100
	TOTAL	27,300	61,100	22,000	110,400
1988-92 Average	DOMESTIC	1,700	34,600	19,000	55,300
	IMPORTED	22,900	24,800	11,300	58,900
	TOTAL	24,500	59,400	30,300	114,200

[1]May include a small amount of bigeye tuna.

ticle, unconverted receipts are used unless otherwise stated.)

Receipts of tuna in American Samoa and California for the third quarter of 1993 were up by 21%, compared to the third quarter of 1992, with increases in skipjack and yellowfin tuna receipts more than offsetting a slight decrease in albacore receipts (Table 3). Total receipts in Puerto Rico were down by 26%, primarily due to a 45% decline in skipjack tuna receipts.

Total domestic deliveries to U.S. canners increased by 9% for the first three quarters of 1993, while imported deliveries decreased by 13% (Table 4). Skipjack tuna was easily the largest component of all domestic deliveries at 126,100 st, while albacore was the largest import component at 66,200 st. Domestic deliveries accounted for 54% of the tuna delivered to U.S. canners during the first nine months of 1993, countering the recent five-year trend of imports outpacing domestic deliveries.

Albacore was the leading import for the third quarter of 1993 at 24,200 st, followed distantly by skipjack tuna at 12,600 st (Table 5). The leading supplier was Taiwan, with 45% of the import market, followed by France and Japan, with 10% and 7% of the market, respectively. The western Pacific Ocean was the main source of all three important tuna species (Table 6): skipjack tuna (51,100 st), yellowfin tuna (16,400 st) and albacore (10,800 st).

Contract prices for domestically caught tuna delivered to U.S. canners in the third quarter of 1993 were considerably higher than the 1992 third quarter prices for all categories of fish (Table 7). Maximum prices (not adjusted for inflation) have increased in each of the past four quarters, reversing a downward trend that started in 1988. Between the first quarter of 1988 and the third

Table 4. U.S. cannery receipts (st) of domestic and imported tuna by species for the first three quarters of 1992, 1993 and the recent (1988-92) averages. Totals may not add due to rounding.

Jan-Sep	Source	Albacore	Skipjack	Yellowfin[1]	TOTAL
1992	DOMESTIC	4,900	112,400	37,000	154,200
	IMPORTED	72,300	64,500	26,400	163,200
	TOTAL	77,200	176,900	63,300	317,400
1993	DOMESTIC	4,900	126,100	37,100	168,000
	IMPORTED	66,200	49,300	26,200	141,600
	TOTAL	71,000	175,300	63,300	309,600
1988-92 Average	DOMESTIC	5,500	89,300	62,100	156,800
	IMPORTED	68,300	79,600	42,000	190,000
	TOTAL	73,800	168,900	104,100	346,800

[1]May include a small amount of bigeye tuna.

Table 5. U.S. cannery imports (st) of tuna by species and source (flag of catcher vessel) for the third quarter of 1993. Totals for the third quarter of 1992 are given for comparison. Note that the flag of the catcher vessel does not necessarily reflect the country of export or point of shipment. Totals may not add due to rounding.

VESSEL FLAG	1993				1992
	Albacore	Skipjack	Yellowfin[1]	TOTAL	TOTAL
F.S. MICRONESIA	0	1,000	500	1,500	1,600
FRANCE	500	3,500	500	4,500	400
GHANA	0	300	400	800	2,200
JAPAN	3,100	*	0	3,100	6,100
PANAMA	0	300	100	400	1,800
PORTUGAL	1,000	0	0	1,000	400
SIERRA LEONE	0	300	200	500	0
SOUTH AFRICA	1,800	0	0	1,800	2,100
SOUTH KOREA	200	500	1,200	1,900	7,200
SPAIN	400	300	300	900	600
TAIWAN	16,700	1,700	1,100	19,500	23,700
USA	0	200	200	500	100
VANUATU	0	1,500	1,000	2,500	300
UNKNOWN	100	2,400	300	2,800	1,700
OTHER	500	700	300	1,500	1,600
TOTAL (as received)	24,200	12,600	6,200	43,100	49,800

*Less than 100 st reported for this category.

[1]May include a small amount of bigeye tuna.

quarter of 1992, prices fell approximately 40%.

U.S. imports of canned tuna packed in water totaled 34,700 st for the third quarter of 1993, up 7% from 1992. For the first nine months of 1993 imports of canned tuna stood at 88,500 st, down 34% from the previous year.

U.S. TUNA FISHERIES UPDATE

EASTERN PACIFIC PURSE SEINE FISHERY

In 1993 ten U.S. purse seiners participated in the eastern tropical Pacific tuna fishery and caught an estimated 19,700 metric tons (mt) of yellowfin tuna and 17,800 mt of skipjack tuna (Figure 1). The yellowfin tuna catch was down 4% from the 1992 catch (20,600 mt), while the skipjack tuna catch was up 25% from the 1992 catch (14,200 mt). The fleet continues to be affected by "dolphin safe" policies and is concentrating its effort on skipjack and yellowfin tuna not associated with dolphins. Based on fishing trips completed between October 1, 1993, and January 9, 1994, only 14% of the sets were made on tuna associated with dolphins, resulting in an incidental mortality of 4 animals.

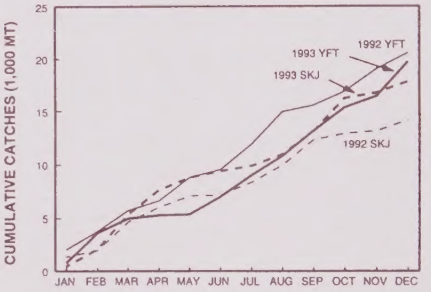

Figure 1. Cumulative tuna catches, by month, for the U.S. eastern Pacific purse seine fishery, 1992 and 1993.

WESTERN PACIFIC PURSE SEINE FISHERY

For the period January through November 1993, 42 U.S. purse seiners licensed to fish in the western tropical Pacific under the South Pacific Tuna Treaty. This fleet landed an estimated 113,800 mt of skipjack tuna and 29,700 mt of yellowfin and bigeye tuna (Figure 2). The skipjack

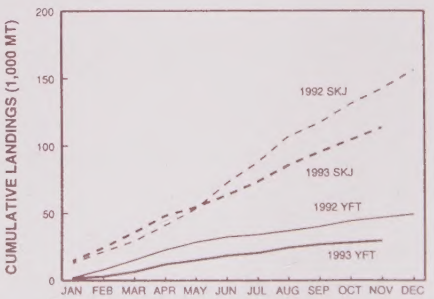

Figure 2. Cumulative tuna landings, by month, for the U.S. western tropical Pacific purse seine fishery, 1992 and 1993.

Table 6. Receipts (st) of tuna by U.S. canneries by species and area of capture for the third quarters of 1992 and 1993. Totals may not add due to rounding.

SOURCE	Albacore		Skipjack		Yellowfin[1]	
	1992	1993	1992	1993	1992	1993
E. ATLANTIC OCEAN						
DOMESTIC	0	0	0	0	0	0
IMPORTED	8,200	7,300	2,200	2,300	400	1,200
TOTAL	8,200	7,300	2,200	2,300	400	1,200
W. ATLANTIC OCEAN						
DOMESTIC	0	0	0	0	0	0
IMPORTED	6,300	4,600	*	0	200	100
TOTAL	6,300	4,600	0	0	200	100
E. PACIFIC OCEAN						
DOMESTIC	1,900	3,000	3,700	3,100	1,100	2,600
IMPORTED	100	0	700	1,100	400	900
TOTAL	2,100	3,000	4,400	4,200	1,400	3,500
W. PACIFIC OCEAN						
DOMESTIC	*	100	49,800	45,400	6,900	13,200
IMPORTED	14,100	10,700	11,500	5,700	4,900	3,200
TOTAL	14,100	10,800	61,200	51,100	11,800	16,400
INDIAN OCEAN						
DOMESTIC	0	0	0	0	0	0
IMPORTED	600	1,700	300	3,600	0	800
TOTAL	600	1,700	300	3,600	0	800

*Less than 100 st reported for this category.

[1]May include a small amount of bigeye tuna.

Table 7. Contract price ranges (U.S. $ per st) for skipjack and yellowfin tuna for delivery to U.S. canneries in American Samoa and Puerto Rico by U.S. vessels arriving from trips in the third quarters of 1992 and 1993.

SIZE CLASS (lbs.)	SKIPJACK		YELLOWFIN	
	1992	1993	1992	1993
<3	165	265-485	165	265-485
3 to 4	365	465-685	365	465-685
4 to 7.5	560	660-880	560	660-880
7.5 to 20	610	710-930	620	720-940
>20	---	---	750	840-1,060

tuna landings were down 20% from the 1992 landings for the same period (142,400 mt) and the yellowfin/bigeye tuna landings were down 37% (from 46,900 mt). *(Report provided by Doug Prescott, NMFS Southwest Fisheries Science Center, La Jolla, CA)*

SOUTHERN PACIFIC ALBACORE FISHERY

Very little news has been received from vessels participating in the fishery this season and no landings estimates are currently available. The U.S. fishing started in November 1993 with fewer vessels participating (about 7) than in the 1992-93 season (40-plus). An experimental fishing cruise in the Tasman Sea was executed by the *Miss Angie* and has recently been completed. Data collected from this cruise are being analyzed. This cruise was a joint effort between the SWFSC and the American Fishermen's Research Foundation. *(Report provided by John Childers, NMFS Southwest Fisheries Science Center, La Jolla, CA)*

ATLANTIC BLUEFIN TUNA FISHERY

The International Commission for the Conservation of Atlantic Tunas (ICCAT) held its Thirteenth Regular Meeting November 8-12, 1993, in Madrid, Spain. Some results of the meeting include: (1) The U.S. fishermen's bluefin tuna quota for the 1994 fishery was set at 1,235 mt (2,723,300 lbs); (2) The 1995 quota for the Western Atlantic fishery was tentatively set at 1,200 mt (2,646,300 lbs), of which U.S. fishermen would receive 734 mt (1,619,000 lbs.). An international peer review of the current stock assessment will be conducted and may impact future reductions in the quota; and (3) ICCAT agreed that imports of fresh bluefin tuna would be accompanied by a statistical document starting June 1, 1994. (Imports of frozen bluefin tuna are already covered by an ICCAT statistical document.) A summary of U.S. Atlantic bluefin tuna landings for all commercial categories for 1993 is given in Table 8. *(Report provided*

Table 8. U.S. commercial landings of Atlantic bluefin tuna for 1993. (About 99.1 percent of the 1993 U.S. commercial quota was taken.)

Category	No. of Fish	Avg. Wt. (lbs.)	Gross Wt. (mt)	Quota (mt)
General	3,385	396.4	608.7	611
Harpoon	308	405.0	56.6	60
Incidental	370	515.9	86.6	84
Purse Seine	1,714	379.9	295.4	302

by Kevin B. Foster, NMFS Northwest Region, Gloucester, MA)

REPORTS

Editor's note: Original reports are published as a service to subscribers and may not represent the views of the NMFS. Readers should contact the authors of reports for details, if needed.

TRACKING STUDY OF DOLPHINS AND TUNA

Michael Scott, Inter-American Tropical Tuna Commission, c/o Scripps Institution of Oceanography, La Jolla, CA 92037

During 1992, the Inter-American Tropical Tuna Commission, in cooperation with the National Marine Fisheries Service and the University of Hawaii, studied the relationship between spotted dolphins and yellowfin tuna by radio-tagging dolphins and sonic-tagging yellowfin tuna from the same aggregation. Six dolphins were tagged and tracked; three time-depth recorders (TDRs) were deployed on the dolphins and two of them were recovered when the dolphins were recaptured. Five tuna were tagged but none could be tracked.

A second cruise was conducted between 6 November - 5 December 1993 aboard the NOAA Ship *McArthur* off the coast of Mexico to continue the research. The Mexican purse seiner, *Convemar*, was chartered by the IATTC and the Mexican National Program for the Taking of Tuna and the Protection of Dolphins (PNAAPD) during this period to capture tuna and dolphins. The PNAADP conducted acoustic and bubble-curtain experiments aboard the seiner. Scientists from the IATTC, NMFS, University of Hawaii, the National University of Costa Rica, and the PNAAPD participated in the tracking study.

Eighteen purse seine sets were made by the *Convemar* and 5 spotted dolphins were radio-tagged (4 with TDRs as well) and 6 tuna were sonic-tagged. The 5 dolphins were tracked from 1 to over 4 days, while 3 of the tuna carrying depth-sensitive transmitters were tracked for 1, 8, and 31 hours. Of the 4 TDRs deployed, 3 were recovered after the respective dolphins had been at liberty for 18.5 hours, 2 days, and over 4 days. These tracks allow the comparison of the horizontal and vertical movements of the two species. The diving data can be interpreted to determine the times and depths that the dolphins feed and their preferred swimming depths in relation to the thermocline. The capability for making repetitive sets on the same dolphins and observing them from the helicopter also provided data on the recruitment of tuna to the dolphins.

Analysis of the TDR data from the 1992 and 1993 cruises (5 dolphins) indicates that spotted dolphins make deep dives at night (to greater than 40 meters), apparently to feed on organisms in the deep scattering layer as they migrate toward the surface at night. These deep dives are particularly apparent just prior to dawn and just after sunset. The deepest dive recorded was to 203 meters during one of the dawn diving bouts. During the daytime the dolphins typically dive to less than 20 meters.

The tuna, however, showed a different pattern. During the day, the tuna swam in the mixed layer depths of about 35-40 meters, just below the typical dive depths of the dolphins. After dusk, however, the tuna narrowed their vertical movements to shallower depths up to about 25 meters at the same time that the dolphins were diving deeper. The deepest swimming depth of the tuna (T1) was 110 meters.

The simultaneous tracking of dolphins and tuna suggests that when the two species swim together, as they often do in the eastern tropical Pacific, the association may not be permanent or obligatory. The different swimming depths of the dolphins and tuna at night are also suggestive of a spatial separation that could result in a partitioning of food resources. Recent food habits studies by the NMFS and IATTC have found differences as well.

An abstract from a recently published paper written by a SWFSC scientist is presented in this space to announce its availability and to report results of tuna research conducted by Center staff.

RECENT SWFSC PUBLICATION: "EVIDENCE OF INTERACTIONS BETWEEN HIGH SEAS DRIFTNET FISHERIES AND THE NORTH AMERICAN TROLL FISHERY FOR ALBACORE"

Norman Bartoo[1], David Holts[1] and Cheryl Brown[2]. Published in North Pacific Commission Bulletin 53(3)

During the 1990 North American albacore troll fishery, observers aboard United States troll vessels examined 19,526 albacore for evidence of driftnet damage. Results indicate that 13.4% of the albacore caught had encountered driftnets. Proportions varied by area fished.

45th TUNA CONFERENCE ANNOUNCED

The 45th Tuna Conference will be held May 23-26, 1994, at the University of California's Lake Arrowhead Conference Center at Lake Arrowhead, California. The Tuna Confer-

[1]Southwest Fisheries Science Center, National Marine Fisheries Service, NOAA, P.O. Box 271, La Jolla, CA 92038.

[2]Southeast Fisheries Science Center, National Marine Fisheries Service, NOAA, 75 Virginia Beach Drive, Miami, FL 33149.

ence is sponsored annually by the U.S. National Marine Fisheries Service and the Inter-American Tropical Tuna Commission. This international meeting provides an opportunity for those in science and industry to present and discuss current topics on tuna and billfish research. The theme for this year's conference is "Movement and Migration".

For more information contact Pierre Kleiber or Randall Rasmussen, Southwest Fisheries Science Center, P.O. Box 271, La Jolla, Ca., 92038 U.S.A.; Telephone (619) 546-7076 or 546 7184; FAX (619) 546-7003.

RECENT DEVELOPMENTS IN TUNA FISHERIES

Editor's note: The following news items, compiled from fishery trade and industry journals, newspapers and NMFS reports, are provided only as a service to our readers. The NMFS does not guarantee their accuracy.

UNITED STATES

U.S.-Japan Consultative Committee on Fisheries-- Government delegates from the United States and Japan met in Washington, D.C., on December 13-14, 1993, to conduct the Second Meeting of the U.S.-Japan Consultative Committee on Fisheries. The Committee was formed to promote bilateral cooperation in the fields of fisheries management and research. It replaced the more formal Governing International Fisheries Agreement (GIFA) between the United States and Japan that expired on December 31, 1991. The Committee holds regular high-level bilateral consultations on fishery issues of mutual concern. Discussions this year focussed on a number of tuna issues: ICCAT and Atlantic bluefin tuna, the IATTC and tuna-dolphin issues, North Pacific albacore, a South Pacific multilateral tuna conference, and tuna longline bycatch issues in the Western Pacific. The talks were very productive and delegations agreed to meet again in 1994 in Japan. (NMFS *Weekly Highlights*, December 6-10, 1993)

WESTERN PACIFIC OCEAN

Trilateral Bluefin Tuna Agreement-- Australia, Japan and New Zealand agreed in November 1993 to renew their southern bluefin tuna agreement. Catch allocations for 1994 will remain the same as in 1993 at 11,750 metric tons (mt) with the following distribution: Japan 6,065 mt; Australia 5,265 mt; and New Zealand 420 mt. In addition to the allocations, the three countries discussed preparations for the implementation of a southern bluefin tuna treaty and investigated the possibility of including in it other countries that also fish bluefin tuna, such as Indonesia and Taiwan. Japan plans to deploy 18 resource-monitoring vessels in the southern bluefin tuna fishery in 1994, the same number as in 1993. (NMFS *Weekly Highlights*, December 20-24, 1993)

Australians Concerned over Bluefin Tuna Numbers-- Australian fisheries authorities are worried that a growing Indonesian-based fleet is emerging as a new threat to bluefin tuna stocks in regional waters. The New South Wales Commercial Fisheries Advisory Council reports that as many as 150 vessels are operating out of Bali and targeting the tuna in its natural spawning grounds south of the Indonesian island but beyond the Australian EEZ. The council said it believes that Japanese and Taiwanese interests are backing many of the fishing boats, providing them with the most modern equipment. Most of the vessels have begun operating only within the past two years. Bluefin tuna stocks around Australia, and particularly in the Tasman Sea, were close to being exhausted until Australia, Japan and New Zealand signed a multilateral agreement to impose quotas. (*World Fishing*, December 1993)

Chinese Tuna Longliners in Micronesia-- The number of Chinese tuna longliners based in Micronesian ports and participating in joint fishery ventures with Micronesian companies is rapidly increasing. A

UPCOMING TUNA MEETINGS

(Organizer; meeting type: sci=science, adm=administration)

- FEB 16. Japan Tuna Conference. Shimizu, Japan. (National Institute of Far Seas Fisheries; adm)
- MAR 7-9. Annual Pacific Island Nations-U.S. Consultation on Purse Seine Tuna fishery in the South Pacific. Nadi, Fiji (Forum Fisheries Agency; adm)
- MAY 23-26. 45th Tuna Conference. Lake Arrowhead, California. (SWFSC; sci)
- JUN 7-9. Annual Meeting of the Inter-American Tropical Tuna Commission. Caracas, Venezuela. (IATTC; adm)
- NOV 14-18. Annual Meeting of the International Commission for the Conservation of Atlantic Tunas. Madrid, Spain. (ICCAT; adm)
- NOV-DEC. Second Expert Consultation on Interactions of Pacific Tuna Fisheries. Shimizu, Japan. (FAO; sci)
- DEC 11-14. International Symposium on Pacific Swordfish. Ensenada, Mexico. (Ensenada Center of Scientific Investigations and Higher Education (CICESE) and SWFSC; sci)

total of 200 Chinese longliners is expected to be based in Micronesia by February 1994. Chinese longliners originally operated in Micronesia under an agreement with the Taiwanese firm, Ting Hong Oceanic Enterprises, which flew the catch of sashimi-grade tuna directly to the Tokyo market on its two jet aircraft. Two Chinese companies, Zhong Yuan and Guangdong-Micronesia Oceanic Enterprises, however, have recently begun joint venture operations independent of Ting Hong, and another two Chinese entities, Palau Marine Industries Corporation and the Zhejiang Provincial Government, are reportedly exploring the possibility of investing in Micronesian fisheries. (NMFS *Weekly Highlights*, December 20-24, 1993)

Taiwan-Pacific Island Tuna Accord-- The Taiwan press reports that Taiwan has reached a fisheries agreement with the South Pacific Forum Fisheries Agency. A five-member FFA delegation was scheduled to visit Taiwan on November 29, 1993, to conclude the agreement. According to Taiwan officials, eight FFA members have expressed a willingness to sign the agreement. (NMFS *Weekly Highlights*, December 20-24, 1993)

Pacific Island Fishermen Criticize Japan-- The uneasy relationship between Japan and the South Pacific island states has erupted again with a stinging attack coming from the latter's Forum Fisheries Agency. The FFA's annual report said Japan had proved to be obstructive to minimum terms and conditions of access to the region's fishing grounds and that it had refused to provide information to the agency's register of fishing boats. "There can be no doubt that this is a deliberate ploy by Japan to further its desire for an international tuna management body in which Japan would be a full member," the annual report said. "This is a proposal that has been repeatedly rejected by the FFA membership."

FFA, which represents 16 South Pacific nations, signalled it was looking to tighten controls on catches by moving to a situation where all fish caught are transshipped through designated ports. The FFA maintains that misreporting results in its member nations receiving only about two or three percent of the real landed value of the total catch, and the agency hinted it was looking at increasing charges to distant fishing nations. (*World Fishing*, December 1993)

EASTERN PACIFIC OCEAN

Meeting on ETP Tuna-Dolphin Issues-- On October 26-27, 1993, a special meeting of the IATTC and an Inter-Governmental Meeting were convened in La Jolla, California, to review the schedule of annual dolphin mortality limits set for the tuna purse seine fisheries in the eastern tropical Pacific Ocean. These meetings were preceded by a meeting in La Jolla on October 25 of a Special Working Group on Technical Issues Associated with the Revision of Dolphin Mortality Limits. The meetings were attended by representatives of Colombia, Costa Rica, Mexico, Panama, Spain, the United States, Vanuatu and Venezuela. An announcement by Mexico that it was formally initiating through diplomatic channels a request to rejoin IATTC was welcomed by all participants at the meeting.

Agreement was reached in the Inter-Governmental Meeting to reduce by 40% the previously scheduled 1994 limit on dolphin mortality in the ETP tuna fisheries from 15,500 to 9,300. All representatives also agreed that in each successive year they will review the scheduled limits on mortality for future years with the objective of determining whether reductions can be achieved. (NMFS *Weekly Highlights*, October 25-29, 1993)

Yellowfin Tuna Embargo-- An affirmative finding for Ecuador as a nation not setting on dolphins while harvesting tuna in the eastern tropical Pacific Ocean was signed on December 16, 1993. The affirmative finding allows yellowfin tuna harvested by Ecuador to continue to be exported to the United States through December 31, 1994. An affirmative finding for Spain as a harvesting nation not setting on dolphin in the ETP was signed on December 23, 1993. The affirmative finding will allow yellowfin tuna to be exported to the United States once the secondary embargo on Spain as an intermediary nation has been lifted. A recommendation for an affirmative finding for Vanuatu as a harvesting nation not setting on dolphin in the ETP has been issued from NMFS and was scheduled for final clearance during the week of December 27, 1993. (NMFS, January 1994)

WESTERN ATLANTIC OCEAN

ICCAT Agrees on Bluefin Tuna Quotas-- ICCAT, an international commission made up of 22 nations, agreed to reduce the 1994 bluefin tuna catch levels in the western Atlantic by 15%, but U.S. fishermen will be allowed to catch approximately the same amount of fish as in 1993 because the U.S. share of the western stock will increase significantly. Delegates at the annual meeting of the ICCAT in Madrid agreed to reduce the western Atlantic quota from 2,394 mt in 1993 to 1,995 mt in 1994. Of the 1994 quota, U.S. fishermen will receive 1,243 mt, five mt less than in 1993. Additionally, ICCAT members agreed that unless revised scientific information indicates otherwise, the 1995 quota for the western Atlantic will be reduced to 1,200 mt, of which U.S. fishermen will receive 735 mt.

Japan agreed to reduce its western Atlantic catch levels from 460 mt in 1993 to levels of 250 mt in 1994 and 150 mt in 1995. Japan's alloca-

tion of the western stock will decrease from 26% in 1993 to 12.5% in 1994, while the U.S. share goes from 52% to 61.25% and Canada's share goes from 21.5% to 26.25%. No other ICCAT members fish in the western Atlantic for bluefin tuna. ICCAT also dealt for the first time with the significant bluefin catches by Japanese fleets just east of 45° longitude, the line which for management and scientific purposes separates the eastern and western stocks. Japan agreed to cap catches between 45° and 35° to no more than 650 metric tons per year for 1994 and 1995, a significant reduction from the 1993 catch of 1,100 mt. (NOAA Press Release, November 12, 1993.)

INDIAN OCEAN

Japanese Seiners Withdraw from Indian Ocean-- Poor catches and appreciation of the yen are making Indian Ocean tuna purse seining operations unprofitable for Japanese fishermen. Ten purse seiners were deployed in this region in early 1992, but only three vessels plan to continue fishing in the western Indian Ocean in 1994. Three seiners were withdrawn from the fishery, three are now fishing in Indonesian waters, and one vessel will go to Senegal waters to conduct exploratory fishing. (NMFS *Weekly Highlights*, December 20-24, 1993)

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